

Figure 1, Messenger Interconnected Processor Array

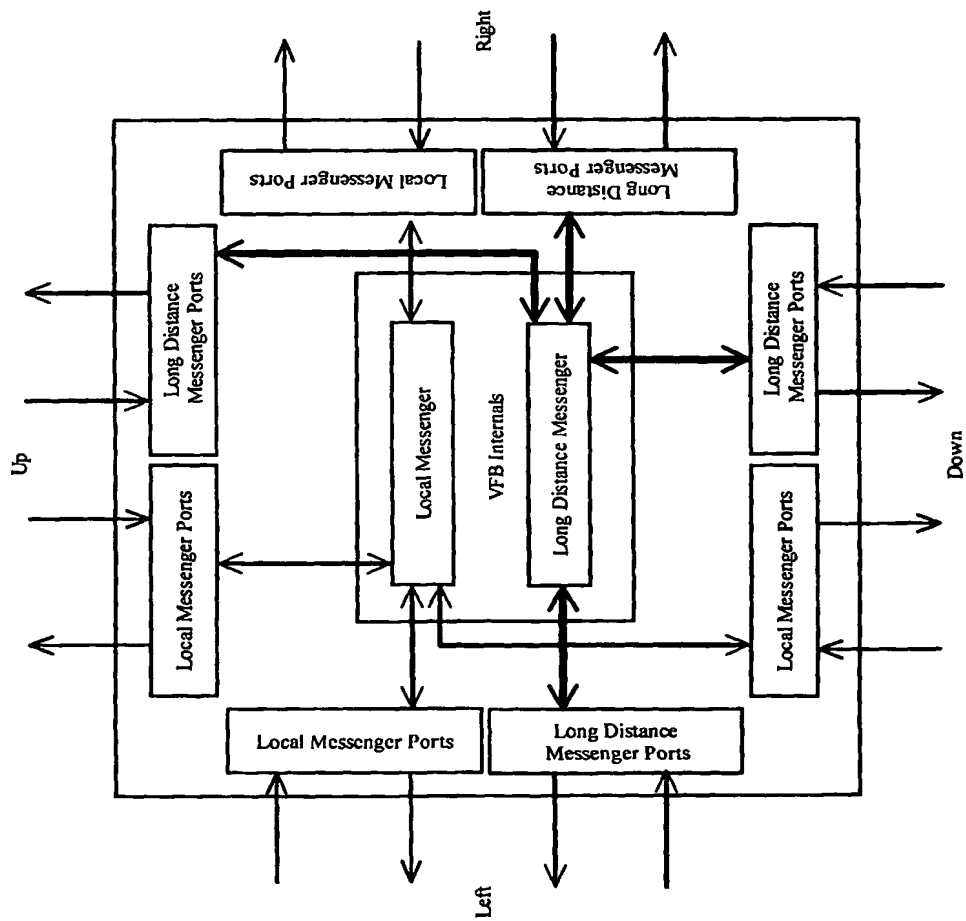


Figure 2, Individual VFB

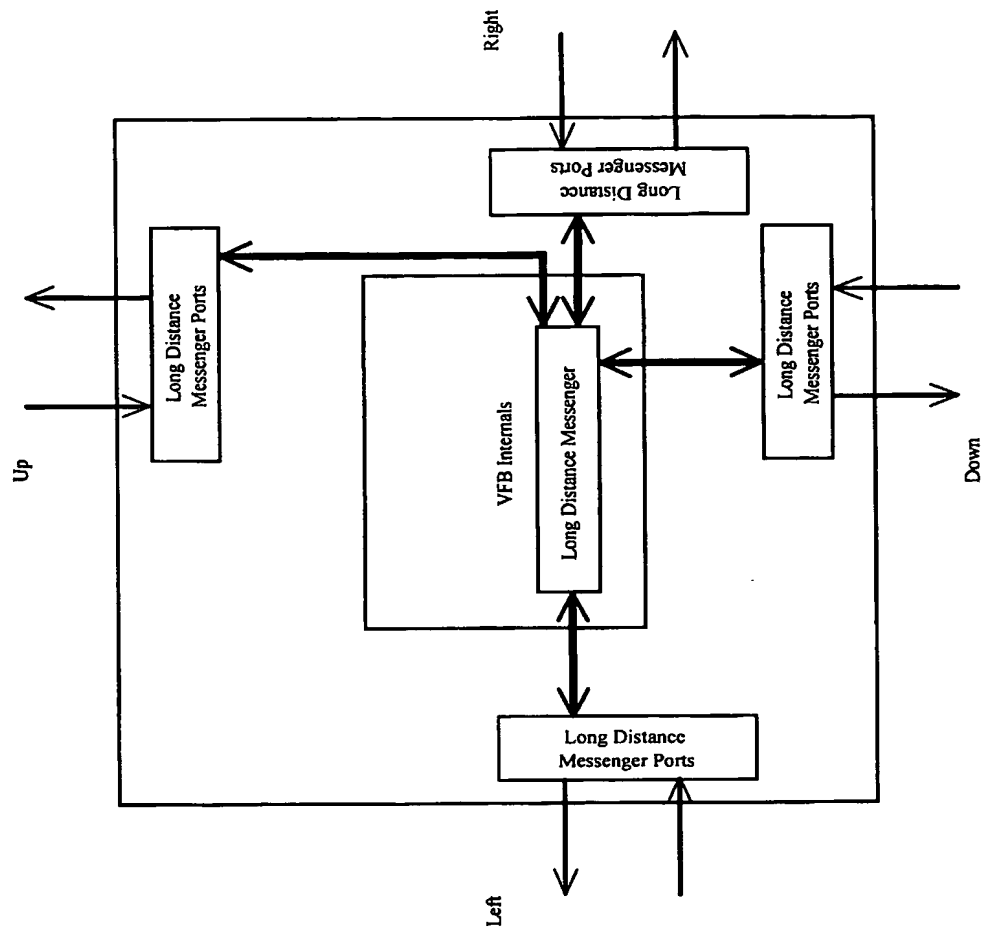
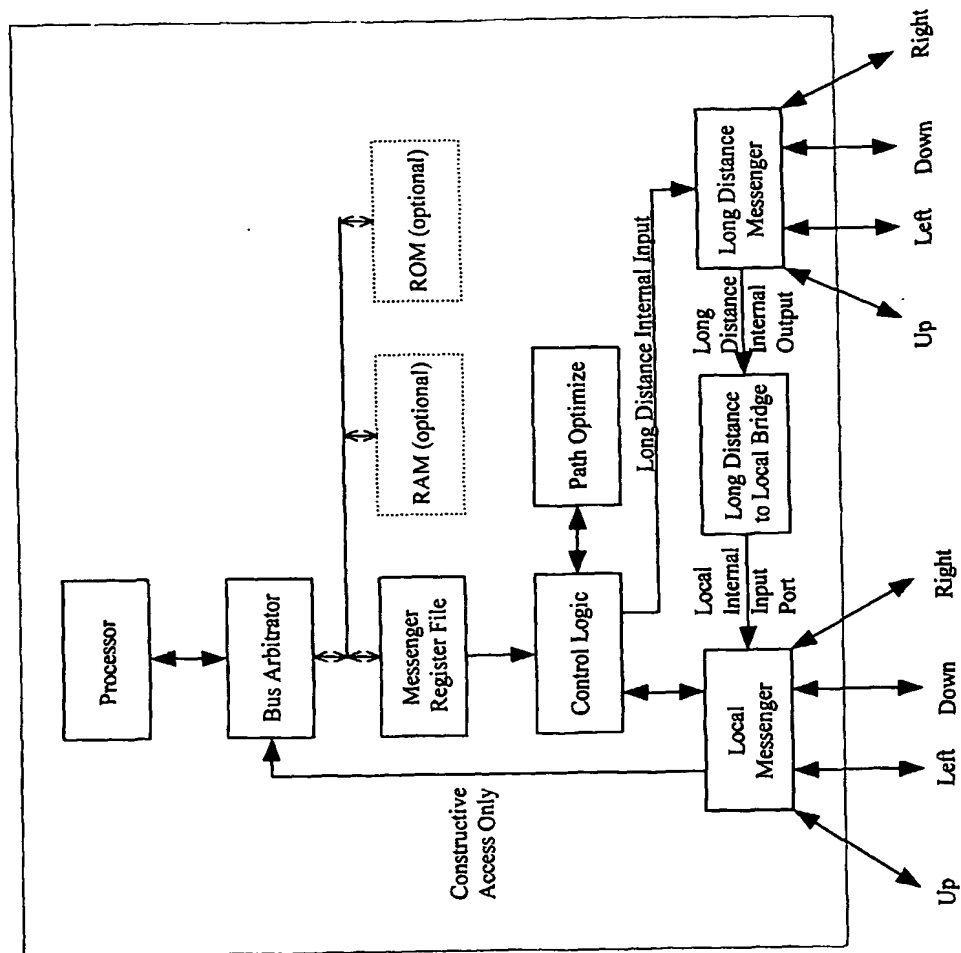


Figure 2A, Individual VFB



### Figure 3, VFB Internals

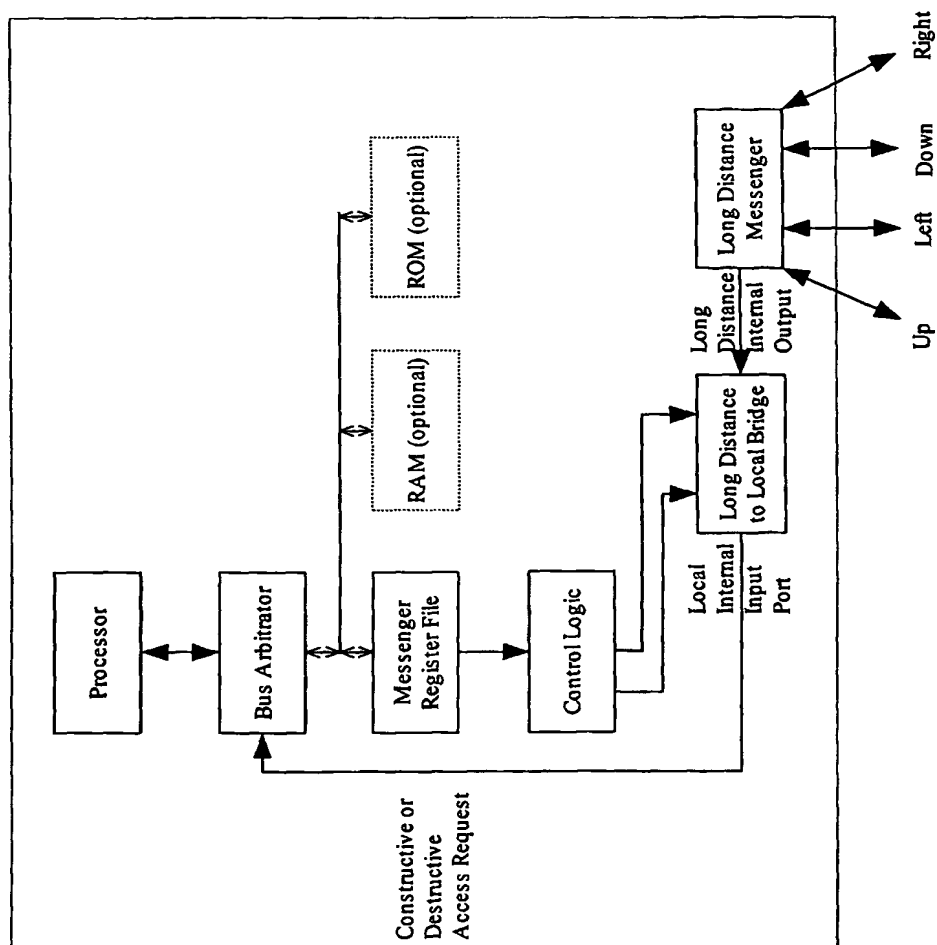


Figure 3A, VFB Internals

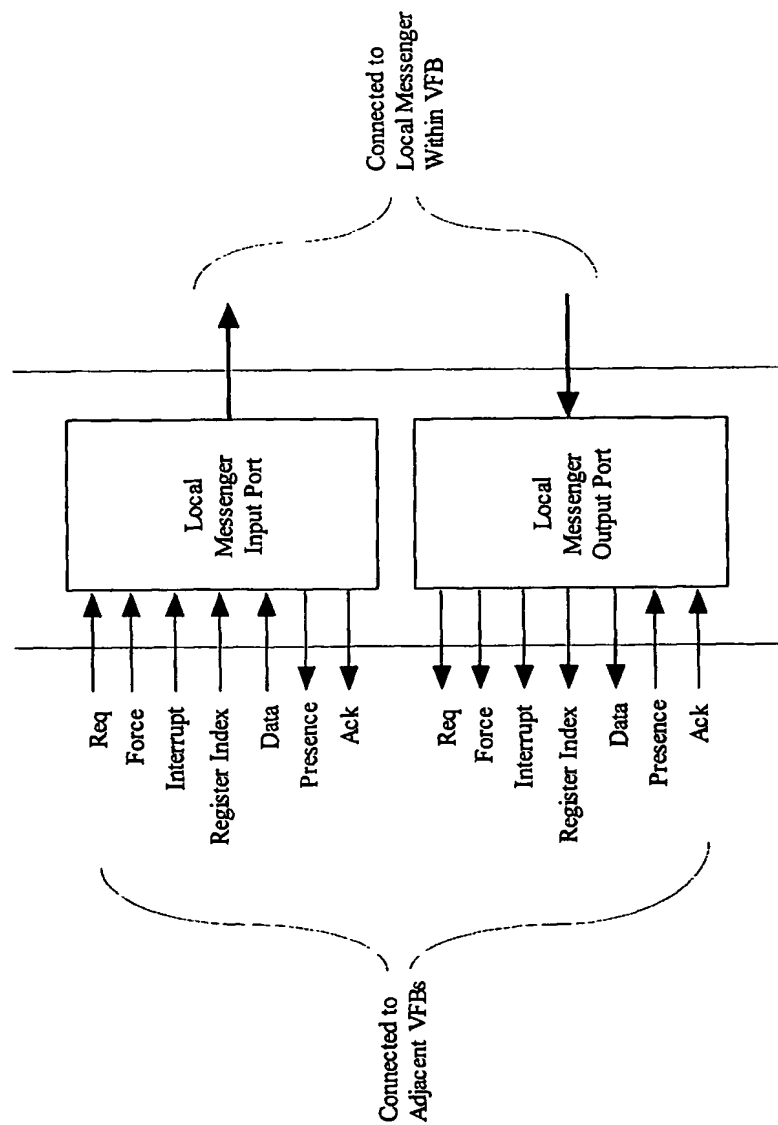


Figure 4, Local Messenger Port

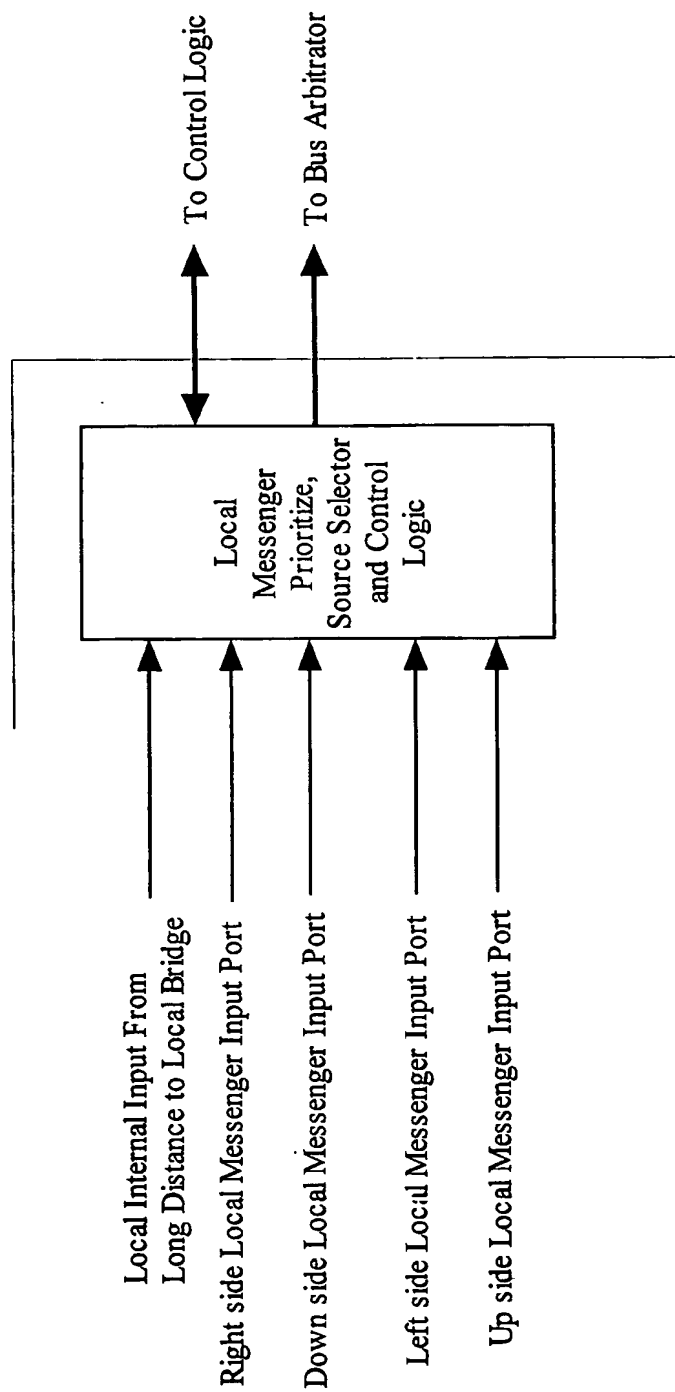


Figure 5, Local Messenger

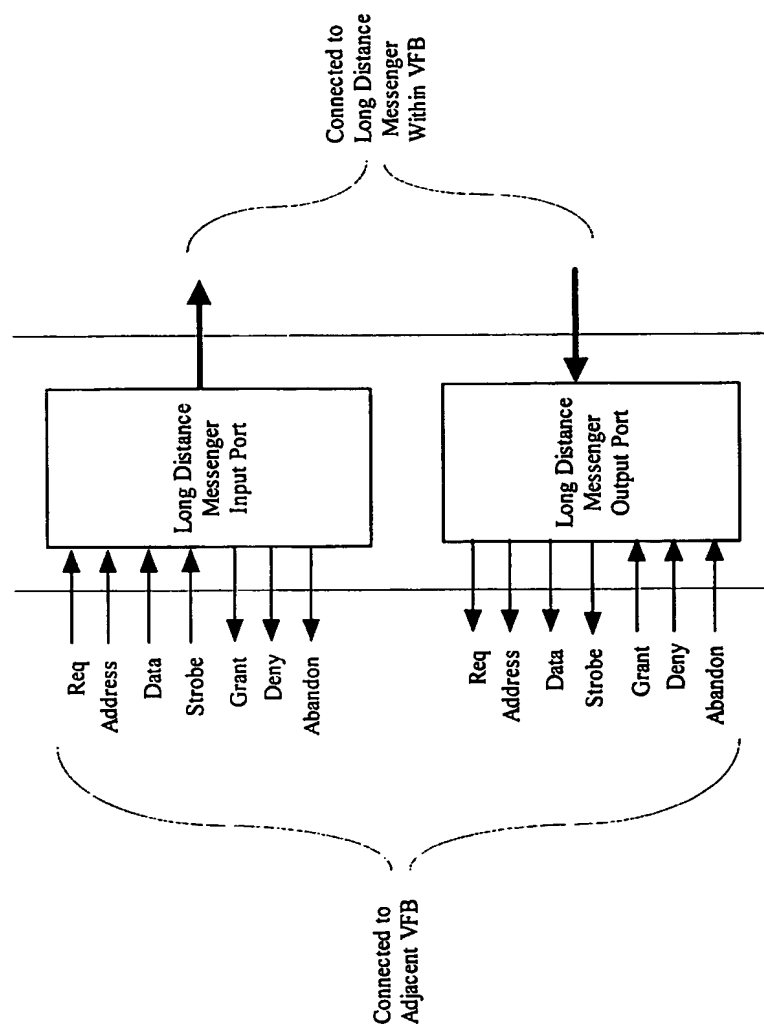


Figure 6, Long Distance Messenger Port



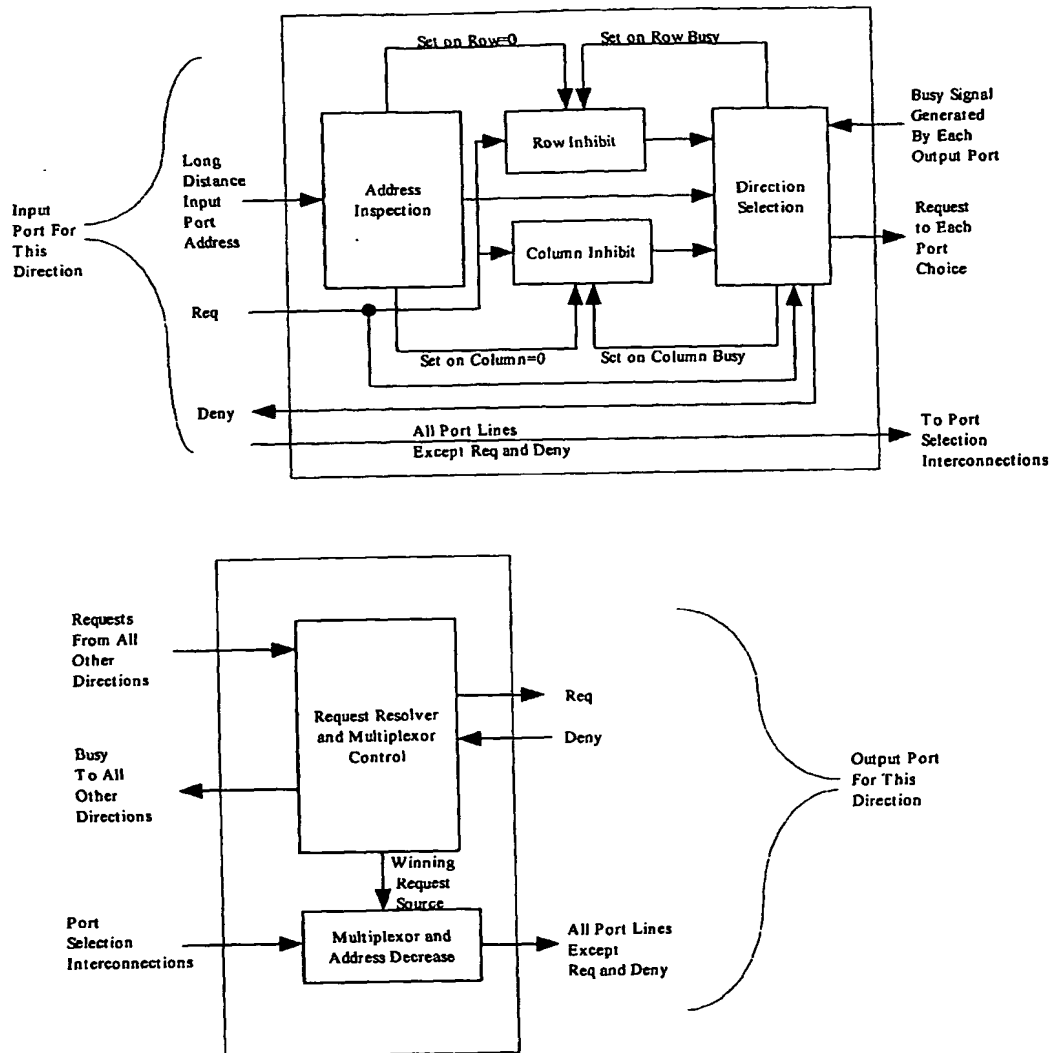


Figure 7, Long Distance Messenger Port Control Logic

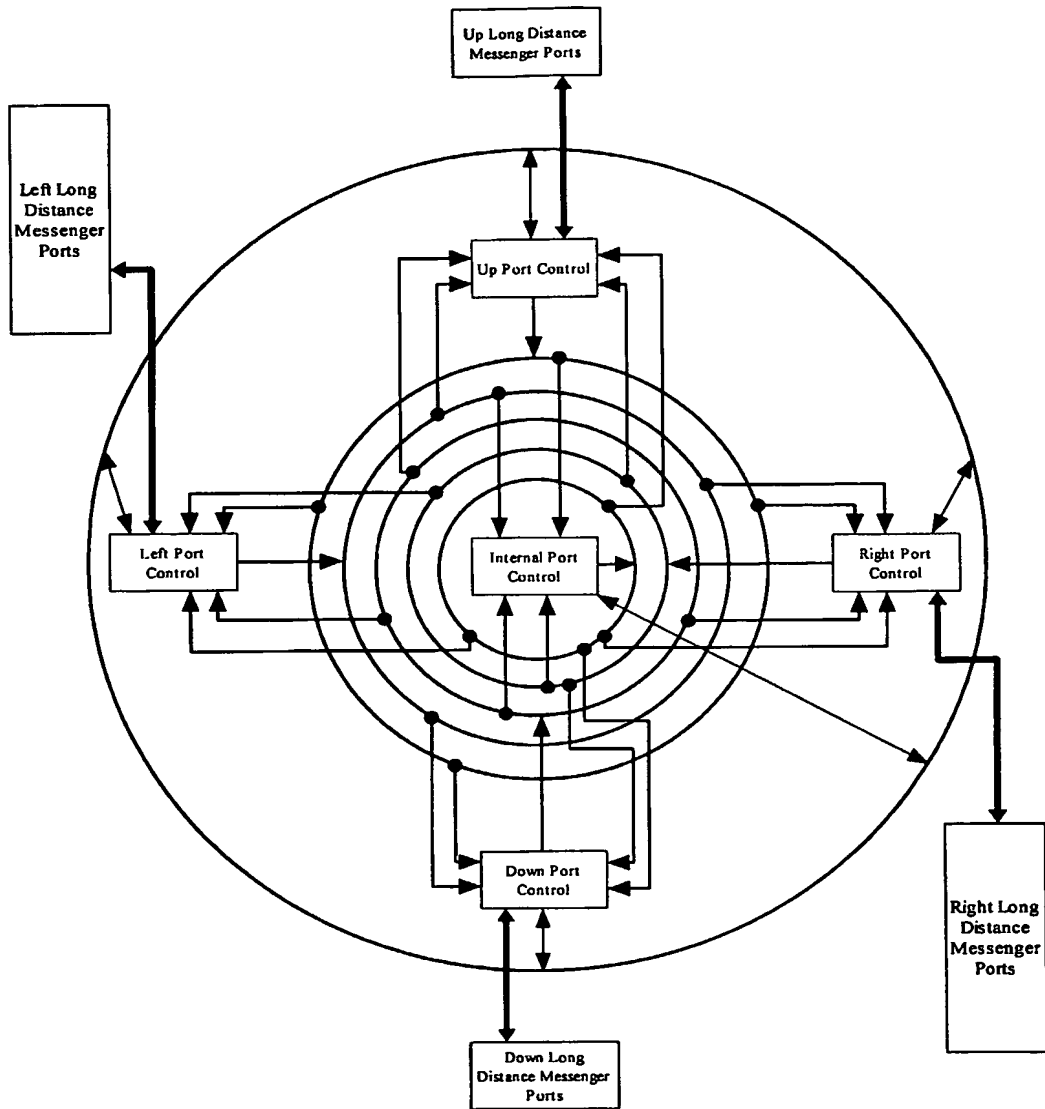


Figure 8, Long Distance Messenger

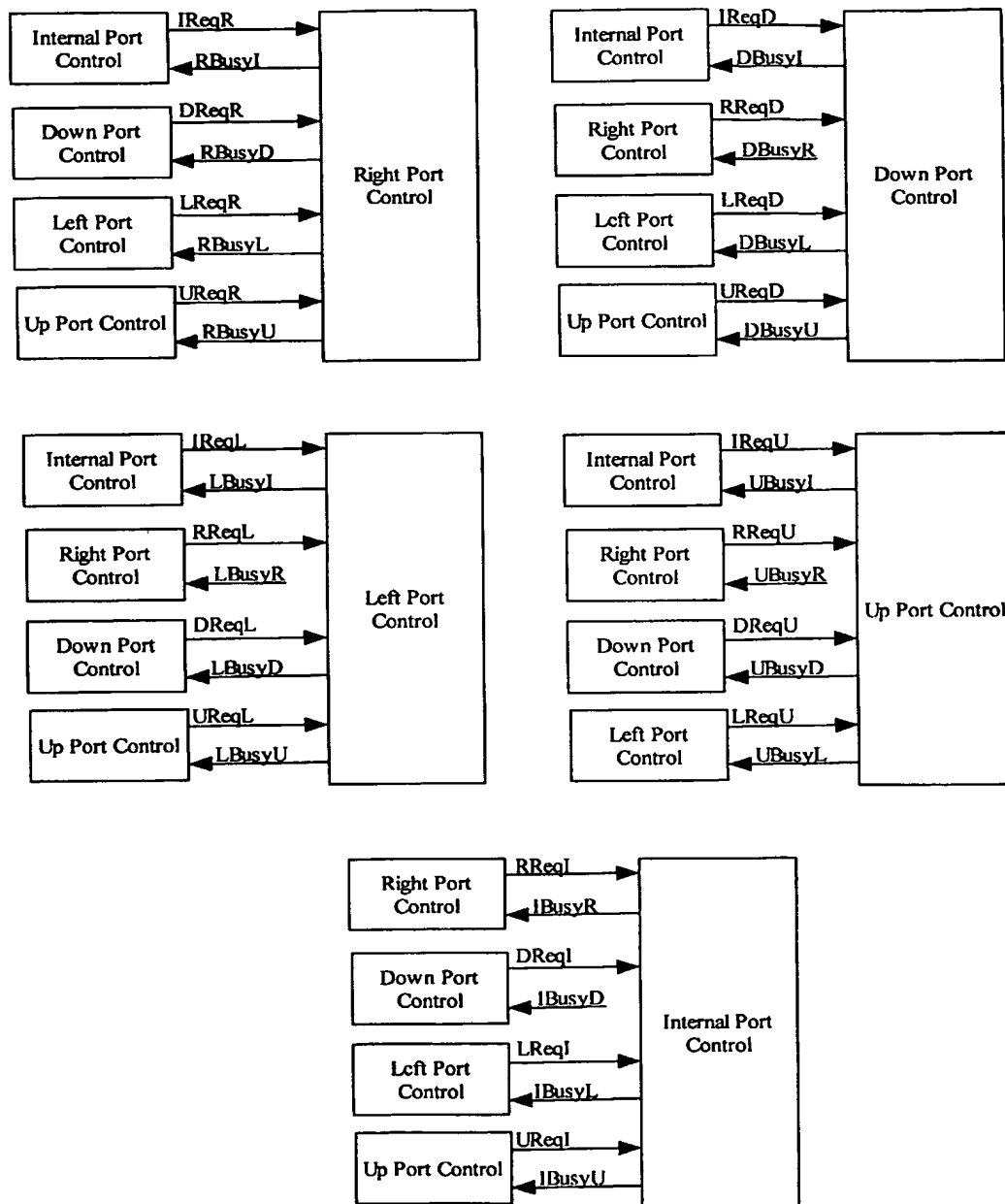


Figure 9, Request and Busy Information Shared Among Long Distance Port Controls

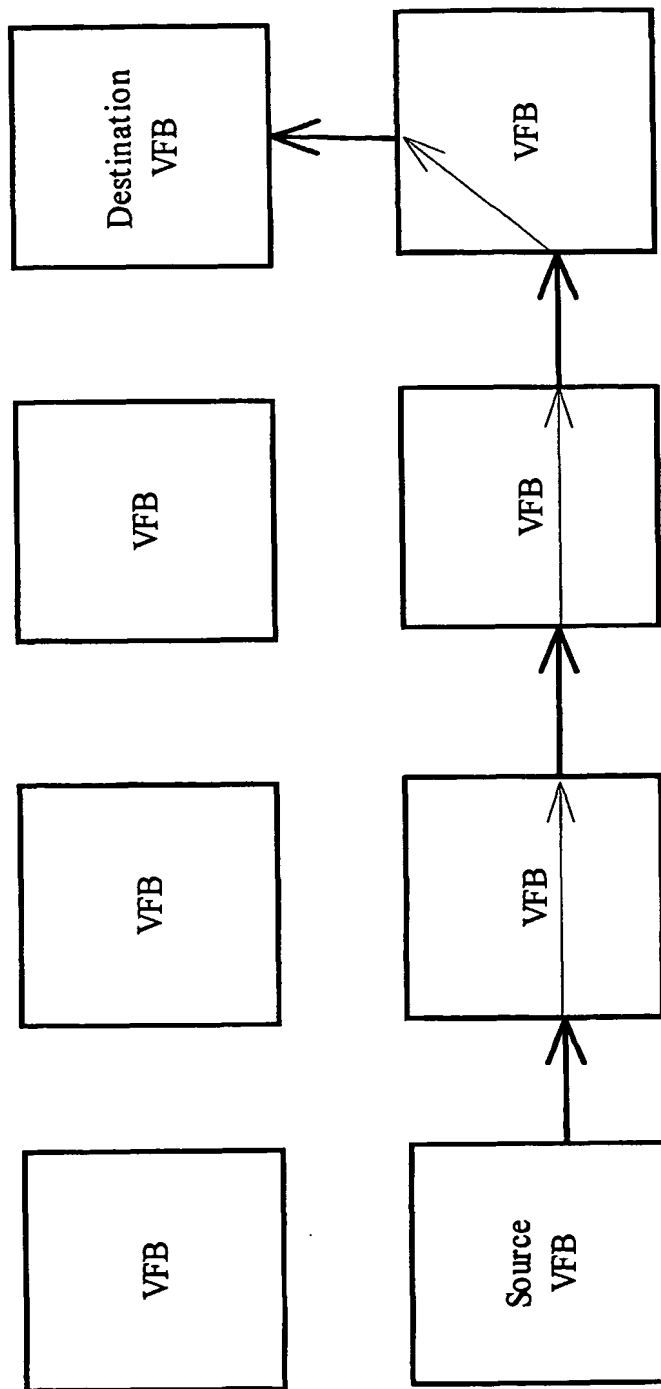


Figure 10, A Long Distance Message Connection, No Path Contention

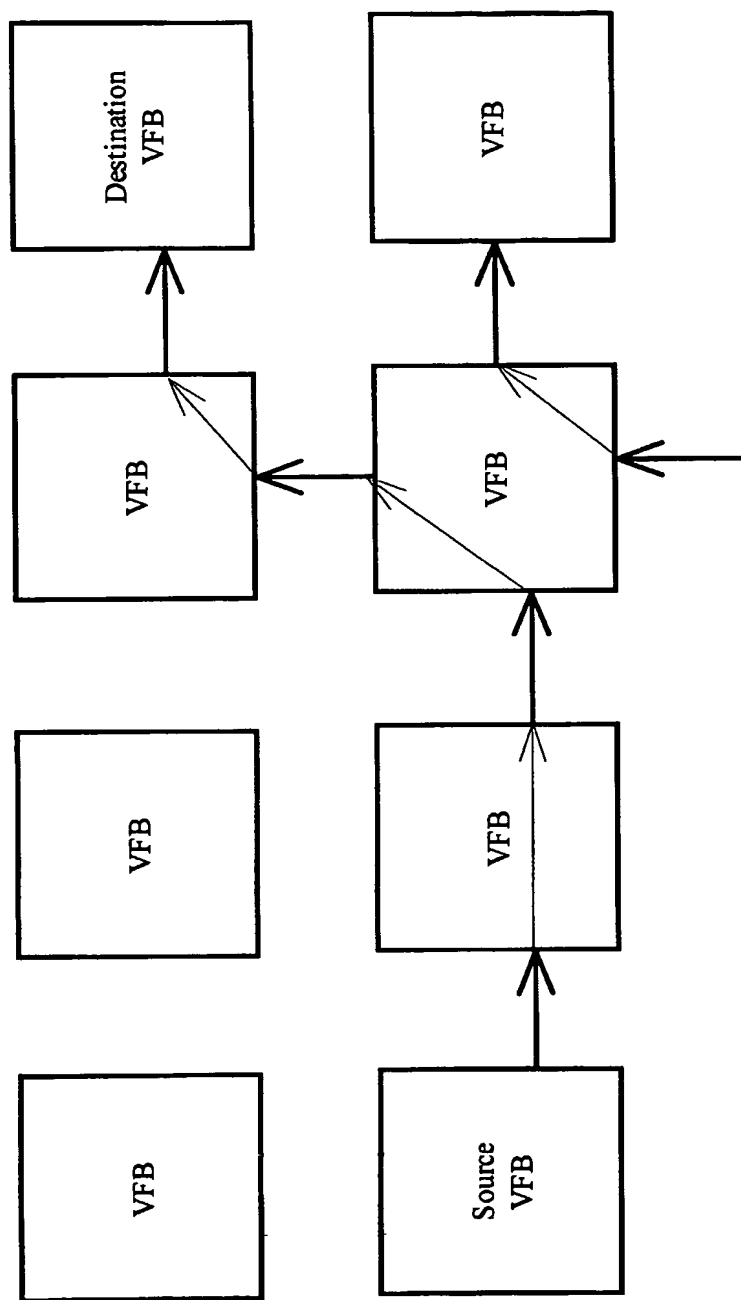


Figure 11, A Long Distance Message Connection, Path Contention Without Deny

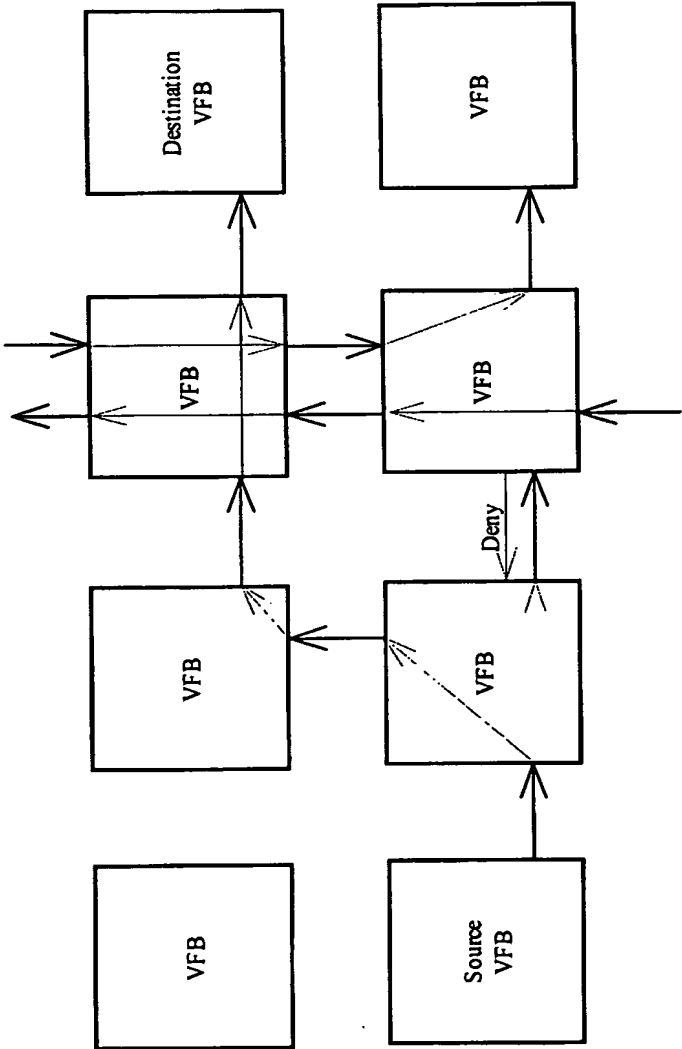


Figure 12, A Long Distance Message Connection, Path Contention With Deny

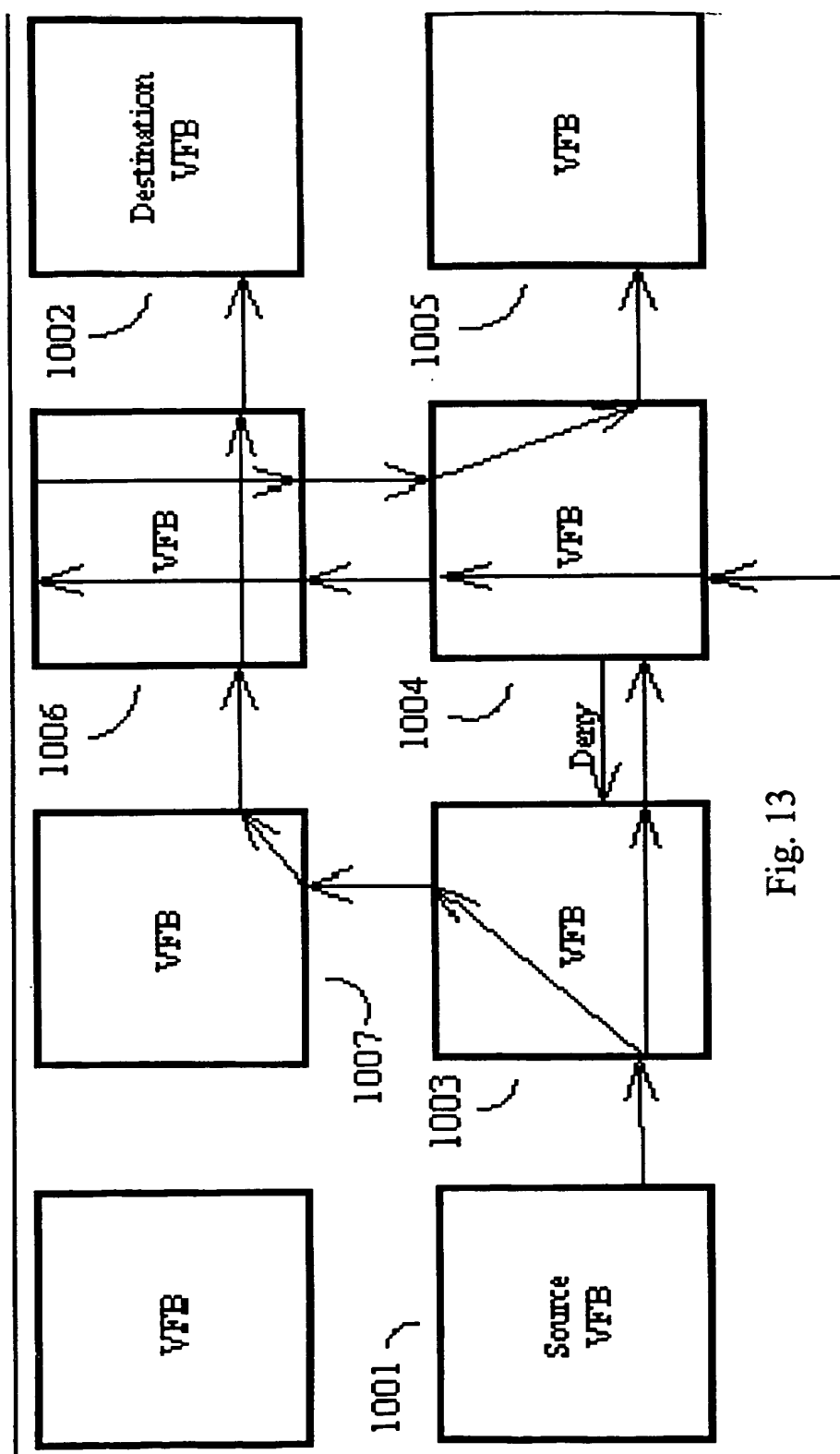


Fig. 14 Bridge Send Operation (Single Port, Optimistic Send)

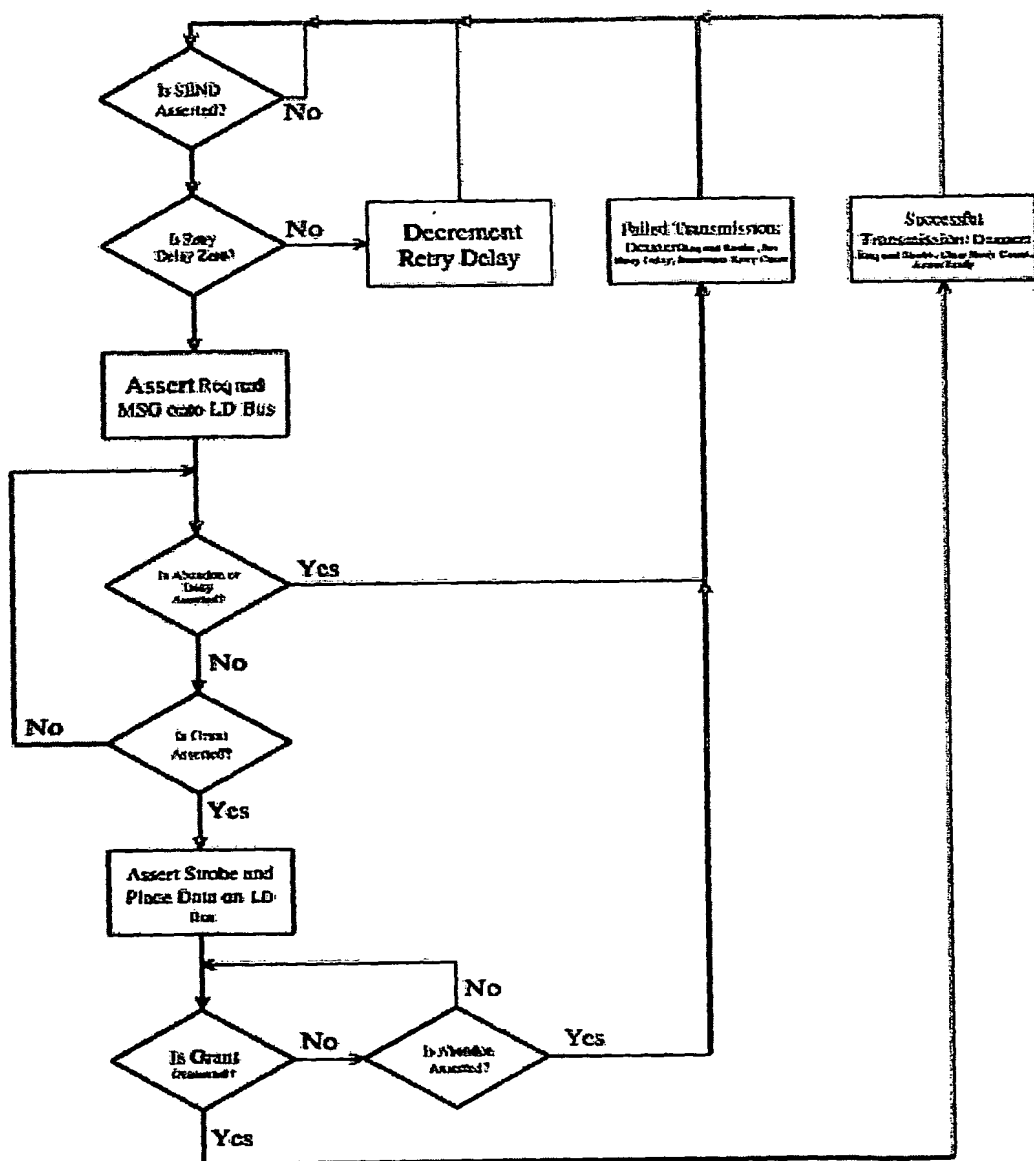
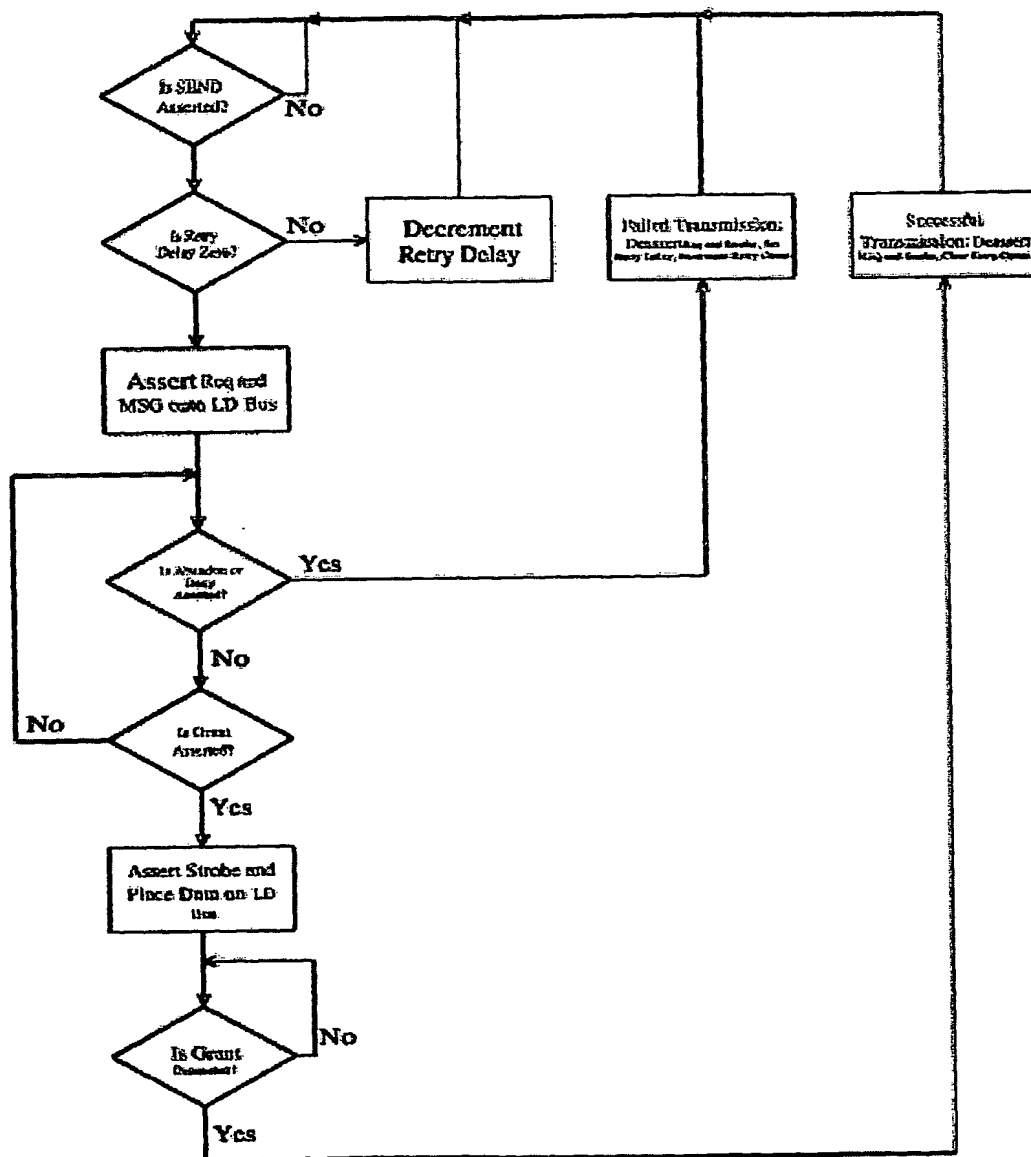




Fig.15 Bridge Send Operation (Single Port, Pessimistic Send)



**Fig. 16 Permissions Test (Dual Send Port Bridge)**

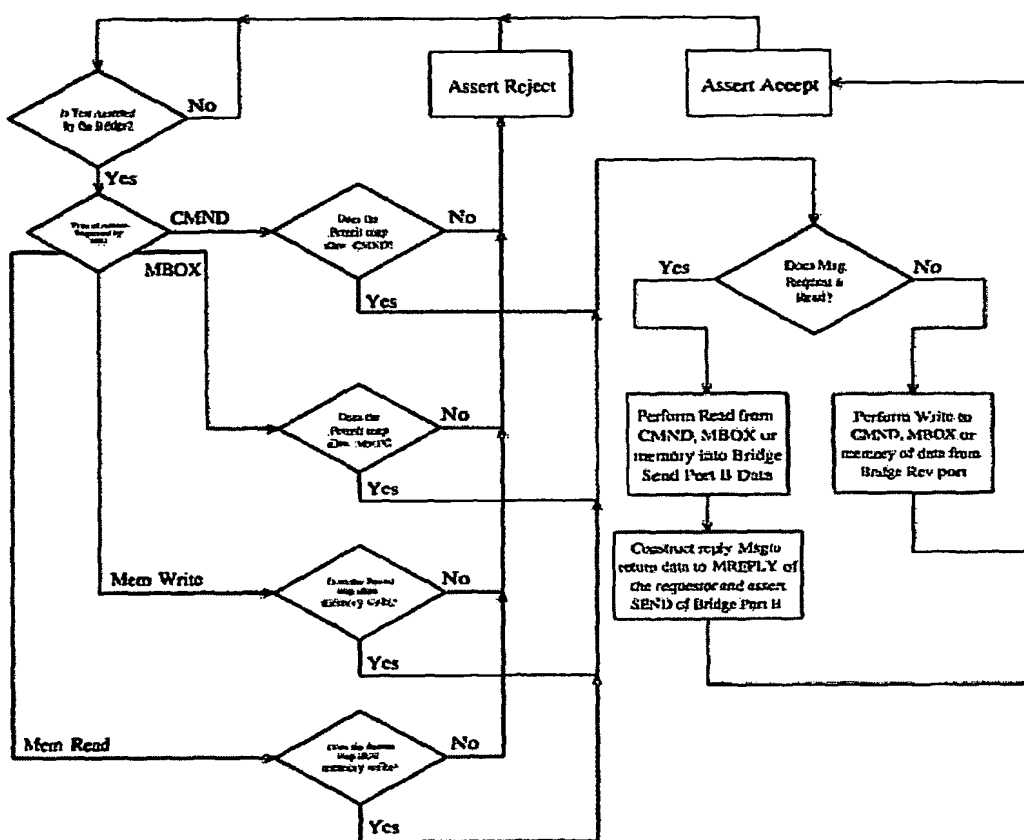
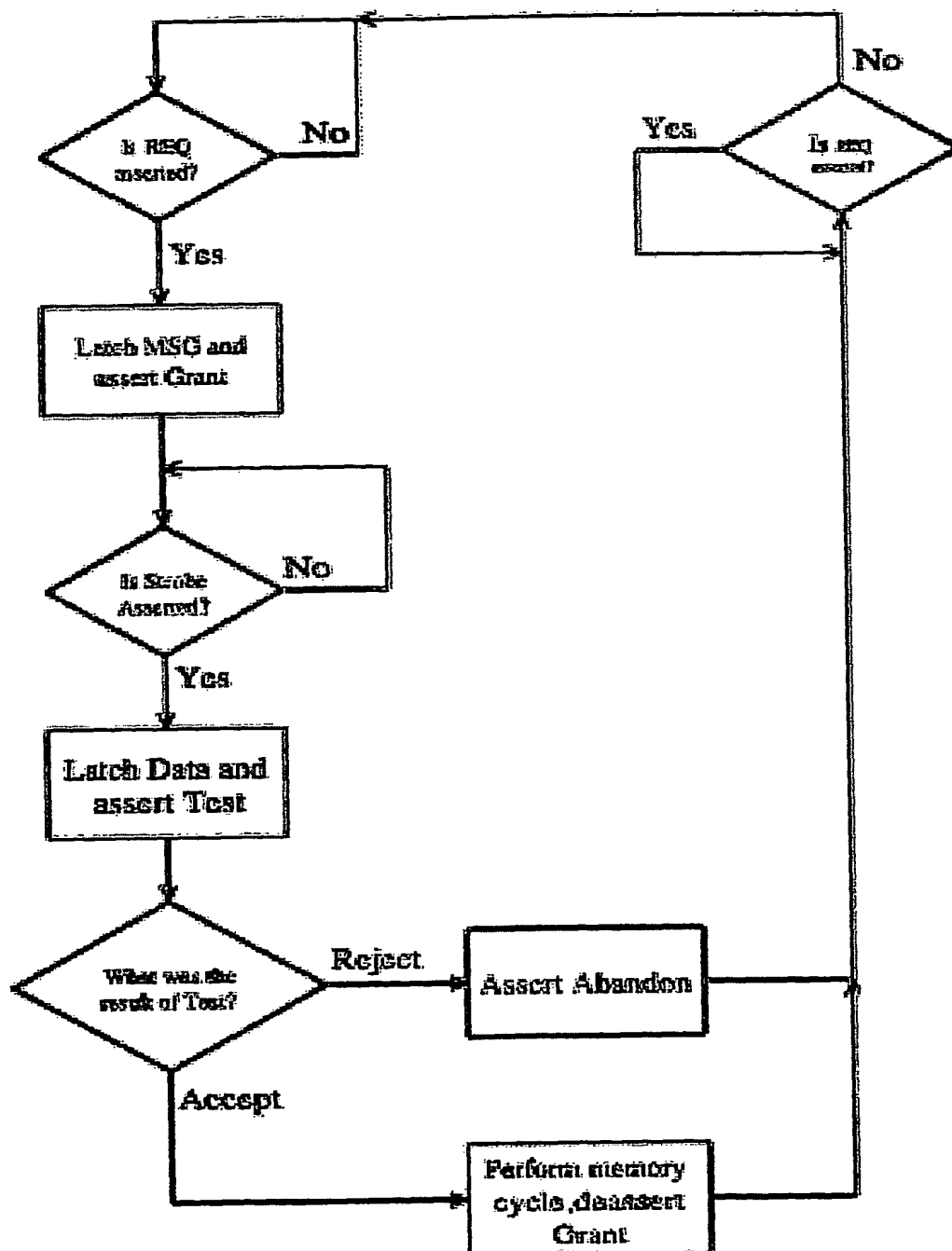


Fig. 17 Bridge Receive (Optimistic)



**Fig. 18 Bridge Receive (Pessimistic)**